

EXHIBIT B



(12) United States Patent
Baker et al.

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(45) Date of Patent: May 18, 2004

(54) RADIO COMMUNICATION SYSTEM

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(73) Assignee: Koninklijke Philips Electronics N.V., Eindhoven (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/478,838

(22) Filed: Jan. 6, 2000

(30) Foreign Application Priority Data

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May 20, 1999 (GB)	9911622
Jul. 2, 1999 (GB)	9915569
Sep. 24, 1999 (GB)	9922575

(51) Int. Cl.⁷ H04Q 7/20

(52) U.S. Cl. 455/522; 455/69; 455/375.1; 370/331

(58) Field of Search 455/522, 69, 575.1; 370/331

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Primary Examiner—Nay Maung

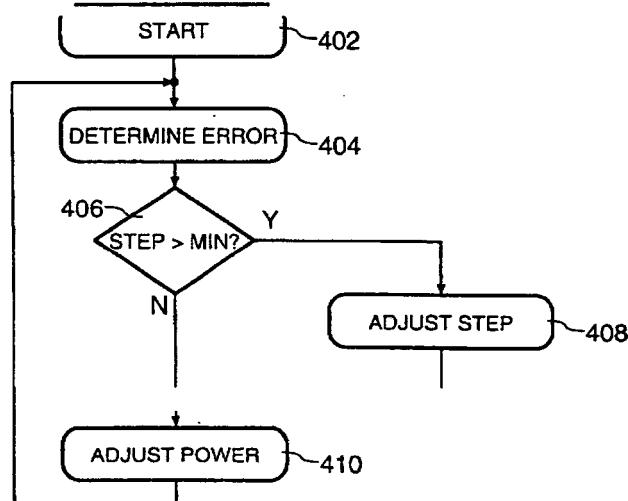
Assistant Examiner—Alan T. Ganit

(74) Attorney, Agent, or Firm—Jack D. Slobod

(57) ABSTRACT

A radio communication system has means for improving power control of a communication channel for the transmission of data after an interruption in the transmission. This is done by applying power control in steps of variable size at the start of a transmission, using a large step size initially which is reduced as the power approaches a target value. In one embodiment the step size is reduced when the sign of a power control command reverses, while in another embodiment the step size is reduced after a predetermined time. These techniques reduce the time taken for power control to be established, thereby addressing the problem that data transmissions at the start of a data channel are likely to be corrupted if the power level is too low, or to generate extra interference if the power level is too high.

20 Claims, 3 Drawing Sheets



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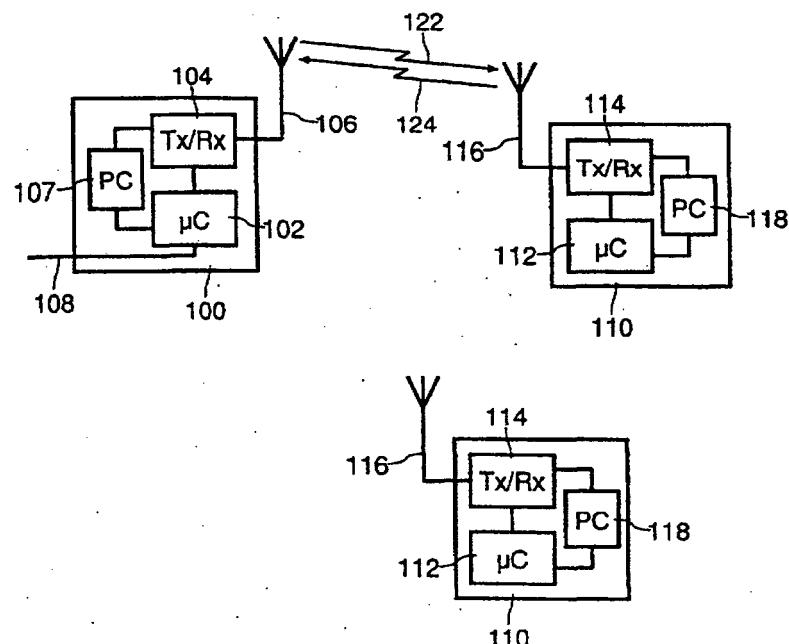


FIG. 1

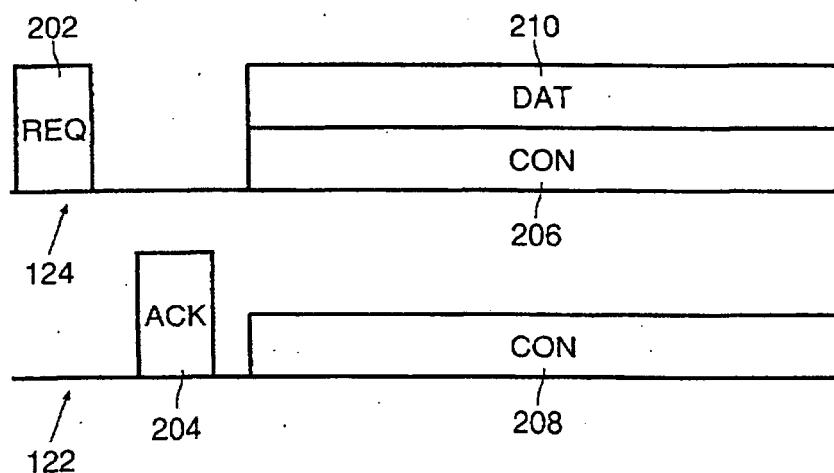


FIG. 2

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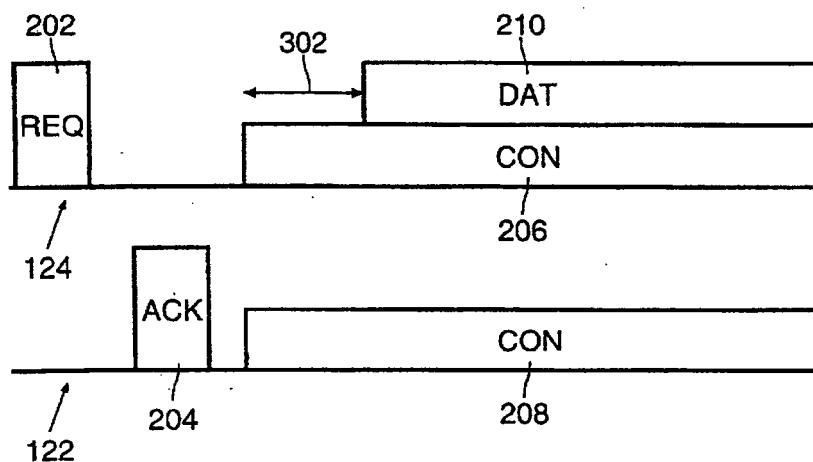


FIG. 3

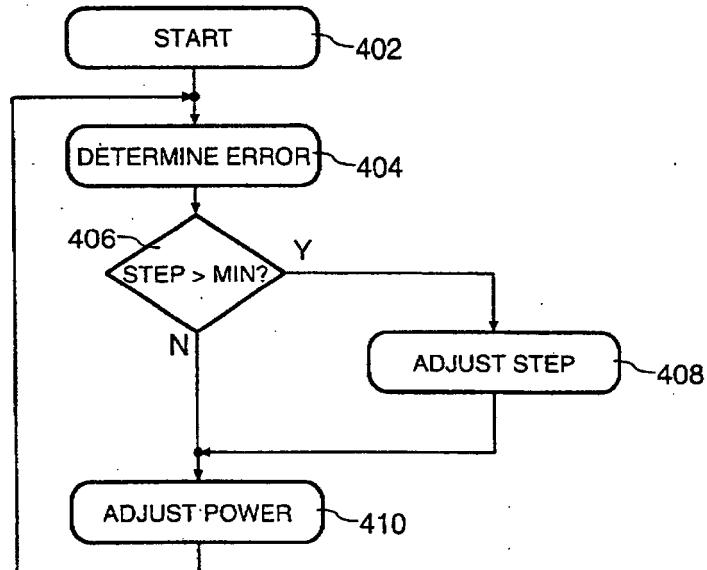


FIG. 4

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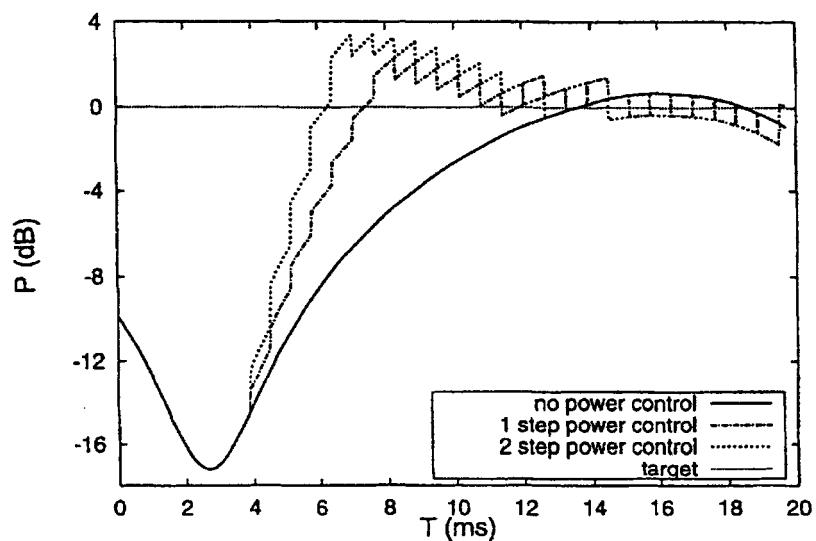


FIG. 5

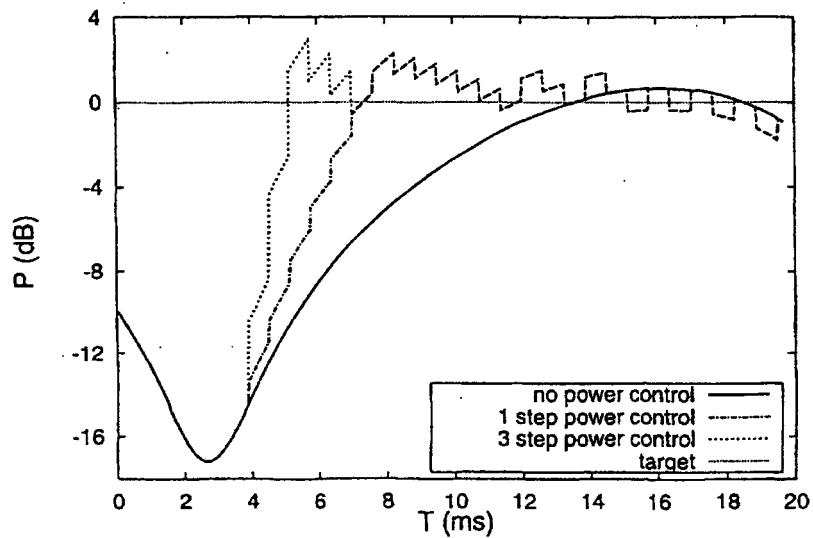


FIG. 6